THE WEATHER OF THE ATLANTIC AND PACIFIC OCEANS

(By the Marine Division, W. F. McDonald in charge)

NORTH ATLANTIC OCEAN

By W. F. McDONALD

Atmospheric pressure.—The Atlantic HIGH during October, 1932, was especially stable from the Azores eastward over the Iberian Peninsula and northwestern Africa. This condition is reflected in the average pressure for the month (see Table 1), which was more than a tenth of an inch above normal over the middle and southeastern Atlantic.

TABLE 1.—*Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic and its shores, October, 1932*

Stations	Average pressure	Departure from normal	Highest	Date	Lowest	Date
	Inches	*Inch*	*Inches*		*Inches*	
Julianehaab, Greenland	29.85	-------	30.50	1	29.49	14
Reykjavik, Iceland	29.61	−0.07	30.25	3	29.11	20
Lerwick, Shetland Islands	29.54	−0.25	30.03	5	28.94	14
Valencia, Ireland	29.78	−0.13	30.24	4	29.10	8
Lisbon, Portugal	30.09	+0.07	30.34	23	29.90	9
Madeira	30.11	+0.12	30.37	24	29.93	3
Horta, Azores	30.28	+0.17	30.49	24	29.84	21
Belle Isle, Newfoundland	29.84	−0.03	30.52	25	29.00	23
Halifax, Nova Scotia	30.04	0.00	30.46	26	29.28	22
Nantucket	30.03	−0.02	30.45	25	29.51	11
Hatteras	30.05	−0.01	30.36	8	29.65	17
Bermuda	30.02	−0.05	30.22	30, 31	29.56	11
Turks Island	29.93	−0.02	30.04	29, 30	29.84	20
Key West	29.93	−0.01	30.10	31	29.71	16
New Orleans	30.00	−0.03	30.28	28	29.41	16
Cape Gracias, Nicaragua	29.82	−0.10	29.92	29, 30, 31	29.72	10

NOTE.—All data based on a. m. observations only, with departures computed from best available normals related to time of observations, except Hatteras, Key West, Nantucket, and New Orleans, which are 24-hour corrected means.

A large deficiency in average pressure occurred in the vicinity of Iceland and the British Isles, with the average at Lerwick, Shetland Islands, a fourth of an inch below normal. There was, similarly, a noteworthy deficiency at Cape Gracias, where the monthly pressure revealed a departure of unusual degree for that region, in that the average for the month was a tenth of an inch below normal. This resulted from the slow movement of a mild disturbance of tropical origin, which is described more fully below.

Cyclones and gales.—October was not a month of severe weather over the Atlantic. Extratropical cyclones were for the most part confined to the more northern tracks. Moderate to fresh gales occurred at scattered places along the main trans-Atlantic steamer lanes on more than half the days of the month but were most frequent and widespread with the advance of the season toward the end of the month.

On the 17th a disturbance took definite form in a previously existent trough of low pressure over mid-ocean, moved slowly northeastward past the Azores during the four days that followed, and caused the strongest gale reported from the Atlantic area during the month. On the 19th the Dutch S. S. *Deucalion* (G. van der Kooy, master) encountered a north-northeast gale of force 11 near latitude 37° N., longitude 45° W.

Tropical disturbances.—Only one, relatively weak, tropical disturbance of West Indian origin occurred, between the 7th and 18th, as described on page 193 of this REVIEW.

This disturbance reached greatest intensity in the northern Gulf of Mexico, where ships' observers reported gales of force 8 to 9 Beaufort.

Fog.—Fog was not reported south of the forty-fifth parallel except near the American coast. Comparatively few days had fog, even on the northern steamer lanes, the maximum prevalence being over the Grand Banks, where this condition was reported on 8 days, the average number of days of occurrence being only 3 to 5 elsewhere.

OCEAN GALES AND STORMS, OCTOBER, 1932

Vessel	Voyage		Position at time of lowest barometer		Gale began	Time of lowest barometer	Gale ended	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Direction and highest force of wind	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
NORTH ATLANTIC OCEAN			° ′	° ′				*Inches*					
Wytheville, Am. S. S.	Antwerp	Baltimore	49 05 N	40 06 W	Oct. 1	Noon, 1	Oct. 1	30.22	SE	SE, 7	NW	—, 9	S-W-NW.
Costa Rica, Du. S. S.	Dover	Barbados	26 29 N	47 44 W	Oct. 2	4 p., 2	Oct. 3	30.02	SE	SSE, 8	S	SE, 8	SE-S-SE.
J. A. Moffett, jr., Am. M. S.	Boston	Corpus Christi.	26 34 N	91 30 W	Oct. 5	4 a., 5	Oct. 5	29.92	N	N, 7	N	N, 8	NW-N.
Nitonian, Br. S. S.	Kingston	Vera Cruz	Off Vera Cruz		---do	10 a., 5	Oct. 6	29.94	W	NNW, —	NNW	—, 10	W-NNW.
Virginia, Hond. S. S.	Boston	Jamaica	42 18 N	70 35 W	Oct. 6	9 p., 6	Oct. 8	29.67	SSW	SSW, 6	WNW	W, 8	SW-W.
Afoundria, Am. S. S.	Glasgow	Panama City, Fla.	51 20 N	20 53 W	Oct. 7	2 a., 7	---do	29.44	WSW	WSW, 8	NW	NW, 9	
Am. Importer, Am. S. S.	Hamburg	New York	50 00 N	13 30 W	---do	4 a., 8	Oct. 9	29.17	SSW	WNW, 7	W	SSW, 9	SSW-WNW.
San Bruno, Pan. S. S.	Tela	Boston	17 00 N	86 58 W	Oct. 9	4 p., 9	Oct. 10	29.64	SSW	SW, 6	E	ESE, 8	SSW-SSE.
Musa, Pan. S. S.	Puerta Cortez	New York	20 09 N	86 19 W	---do	10 p., 9	---do	29.74	ESE	ESE, 7	ENE	E, 8	
Kenbane Head, Br. S. S.	Montreal	Belfast	55 32 N	22 06 W	Oct. 6	8 a., 9	---do	29.53	NW	NNW, 9	N	—, 9	NNW-N.
Scanpenn, Am. S. S.	Copenhagen	Wilmington, Del.	57 53 N	8 10 E	Oct. 8	10 a., 9	Oct. 9	29.18	ESE	SE, 7	SE	SE, 9	SE-E.
Am. Importer, Am. S. S.	Hamburg	New York	49 50 N	31 41 W	Oct. 10	Noon, 10	Oct. 10	29.68	W	W, 8	N	NW, 10	
West Imboden, Am. S. S.	New York	Riode Janeiro	31 05 N	61 24 W	Oct. 9	4 a., 10	---do	29.63	NE	SW, 5	SW	ENE, 9	ENE-SW.
El Estero, Am. S. S.	Galveston	Boston	41 30 N	69 30 W	Oct. 12	Mdt., 12	Oct. 13	29.67	NW	NW, 8	NW	—, 8	Steady.
Duquesne, Am. S. S.	Rotterdam	New Orleans	45 50 N	16 13 W	---do	8 a., 12	Oct. 12	29.88	N	N, 7	N	N, 8	Do.
Chester Valley, Am. S. S.	Galveston	Genoa	38 56 N	54 19 W	Oct. 10	6 a., 12	---do	29.67	E	S, 6	SSE	SE, 8	
Wm. Boyce Thompson, Am. S. S.	Marcus Hook	Houston	28 40 N	91 15 W	Oct. 15	4 p., 15	Oct. 16	29.50	SSE	SSE, 4	NW	NNW, 8	
Comal, Am. S. S.	New Orleans	Tampa	28 48 N	88 52 W	-------	2 a., 16	Oct. 17	29.39	-------	SSW, 8	SW	SW, 9	Steady.
El Almirante, Am. S. S.	---do	New York	31 00 N	79 00 W	Oct. 16	2 a., 16	Oct. 18	29.69	SE	SE, 8	SE	—, 9	Do.
Memphis City, Am. S. S.	New York	Canal Zone	34 00 N	74 00 W	---do	4 p., 17	Oct. 17	29.79	SE	SSE, 8	SW	SE, 9	SE-SW.
Greystoke Castle, Br. M. S.	Port Said	New York	36 55 N	44 20 W	Oct. 17	4 p., 17	Oct. 18	29.89	Var	N, 4	N	N, 9	Steady.
Exeter, Am. S. S.	New York	Palma	39 58 N	70 10 W	Oct. 19	2 a., 19	Oct. 23	29.71	SE	E, 3	SW	SE, 9	
Deucalion, Du. S. S.	Haiti	Havre	36 46 N	44 58 W	Oct. 17	4 a., 19	Oct. 20	29.51	NNE	NNE, 11	NNE	NNE, 11	Steady.
Scanyork, Am. S. S.	Copenhagen	Philadelphia	56 52 N	24 52 W	Oct. 19	11 a., 19	---do	28.91	SE	WNW, 9	W	W, 9	SE-S-W.
Flandre, Fr. S. S.	St. Nazaire	Central America.	44 00 N	30 00 W	Oct. 21	11 p., 21	Oct. 22	29.49	SW	SW, 8	NW	SW, 8	SW-NW.
City of Newport News, Am. S. S.	Havre	Baltimore	40 00 N	51 00 W	Oct. 22	8 a., 22	---do	29.59	S	S, 9	NW	—, 9	S-NW.

OCEAN GALES AND STORMS, OCTOBER, 1932—Continued

Vessel	Voyage		Position at time of lowest barometer		Gale began	Time of lowest barometer	Gale ended	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Direction and highest force of wind	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
NORTH ATLANTIC OCEAN—Continued			° ′	° ′				*Inches*					
West Madaket, Am. S. S.	Antwerp	Mobile	50 30 N	1 00 W	Oct. 23	8 p., 23	Oct. 24	29.63	SW	WSW, 9	WNW	WSW, 9	WSW-W.
Marie Leonhardt, Ger. S. S.	Bremen	Searsport, Me.	51 12 N	26 05 W	Oct. 26	Noon, 26	Oct. 26	29.92	W	W, 8	NW	NW, 10	
Hoxie, Am. S. S.	Cork	New York	50 44 N	14 51 W	do	4 a., 27	Oct. 28	29.64	NW	NW, 7	NW	NW, 10	Steady.
Gonzenheim, Ger. S. S.	Newcastle on Tyne.	Batwood, Newfoundland.	57 32 N	25 10 W	Oct. 28	11 p., 28	Oct. 29	29.62	WSW	WNW, 8	NW	WNW, 10	W-WNW.
Themisto, Du. S. S.	Durban	Montreal	41 28 N	52 40 W	do	9 a., 29	Oct. 30	29.82	S	SW, 6	SW	WSW, 9	SW-WNW.
Motocarline, Belg. M. S.	Antwerp	Baytown	50 21 N	2 14 W	Oct. 29	10 p., 29	Oct. 31	29.37	W	S, 9	NNW	WSW, 9	S-W-NW.
Marie Leonhardt, Ger. S. S.	Bremen	Searsport, Me.	49 20 N	42 17 W	Oct. 30	Noon, 30	do	29.72	SW	WSW, 10	W	WSW, 10	Steady.
Themisto, Du. S. S.	Durban	Montreal	44 32 N	56 14 W	do	1 a., 31	do	29.86	SW	SW, 7	SW	WSW, 9	SW-WNW.
NORTH PACIFIC OCEAN													
Slemmestad, Nor. M. S.	San Pedro	Yokohama	41 21 N	173 53 E	Oct. 2	Noon, 5	Oct. 4	29.68	S	W, 8	NNW	WNW, 9	SW-W.
Stanley Dollar, Am. S. S.	Philippines	Los Angeles	24 42 N	136 49 E	do	Noon, 3	do	29.27	N	NW, —11	W	NW, 11	N-NW-W.
Silveray, Br. M. S.	Gorontalo	San Francisco	44 22 N	159 36 W	do	7 a., 5	Oct. 7	29.34	SW	SE, —	S	E, 10	SE-SSW.
Kiyo Maru, Jap. S. S.	San Pedro	Yokohama	36 00 N	174 40 W	Oct. 3	8 p., 3	Oct. 4	29.78	WSW	W, —	NW	WNW, 8	WSW-W.
Pres. Polk, Am. S. S.	Honolulu	Kobe	32 55 N	145 00 E	Oct. 4	5 p., 4	do	29.05	SSE	SSE, 10	W	SSE, 10	Steady.
New York, Am. S. S.	Dairen	San Francisco	43 40 N	148 55 E	do	8 a., 5	Oct. 5	28.90		NE, 9	NW	NE, 9	ENE-NE.
Koyo Maru, Jap. S. S.	Yokohama	Los Angeles	36 46 N	146 33 E	Oct. 4	Mdt., 4	do	28.60	SSE	SE, 12	NW	SSW, 12	SE-SSE.
Holystone, Br. S. S.	Panama	Vancouver	14 15 N	95 45 W	Oct. 5	6 a., 6	Oct. 6	29.82	N	NNE, —	NNE	N, 9	N-NNE.
Potter, Am. M. S.	Shanghai	San Pedro	43 00 N	167 30 E	do	1 a., 7	Oct. 8	29.17	SW	WNW, —	NNE	NW, 9	W-NW.
Golden Wall, Am. S. S.	Siain, P. I.	San Francisco	40 10 N	175 25 W	Oct. 6	4 p., 6	Oct. 7	29.39	W	WSW, —	W	W, 8	W-WSW.
Soyo Maru, Jap. M. S.	San Francisco	Yokohama	47 20 N	172 23 W	Oct. 7	2 a., 7	Oct. 10	28.71	W	NW, 2	W	W, 9	NW-W.
New York, Am. S. S.	Dairen	San Francisco	46 30 N	170 27 E	Oct. 8	2 p., 10	do	29.66	WNW	WNW, —	WNW	WNW, 9	Steady.
Stanley Dollar, Am. S. S.	Philippines	Los Angeles	38 30 N	161 51 E	Oct. 9	10 a., 10	do	29.39	SE	SW, 10	W	SW, 10	S-SW-W
Golden Sun, Am. S. S.	Columbia River.	Yokohama	48 30 N	146 55 W	Oct. 10	2 a., 10	do	28.81	SW	WNW, 8	W	WNW, 8	WNW-SE.
Soyo Maru, Jap. M. S.	San Francisco	do	45 18 N	170 20 E	Oct. 12	4 a., 12	Oct. 13	29.65	W	SSE, 3	W	W, 8	SSE-W.
Do	do	do	36 37 N	143 37 E	Oct. 17	3 a., 17	Oct. 17	29.52	NW	NW, 8	NW	NW, 9	ENE-NW.
Niagara, Br. M. S.	Victoria	Honolulu	46 35 N	128 44 W	Oct. 13	2 p., 13	Oct. 15	28.94	S	S, 7	NW	W, 10	S-SW.
Stanley Dollar, Am. S. S.	Philippines	Los Angeles	43 05 N	152 58 W	Oct. 17	5 a., 18	Oct. 18	29.53	SSE	S, 10	W	S, 10	SSE-S-W.
Grays Harbor, Am. S. S.	Tsugaru Strait.	Puget Sound	49 55 N	179 02 E	Oct. 20	4 p., 22	Oct. 22	29.47	SSE	WSW, 8	W	WSW, 9	WSW-WNW.
Tyndareus, Br. S. S.	Yokohama	Victoria	49 58 N	167 28 W	Oct. 25	9 a., 26	Oct. 27	30.07	S	S, 8	SW	S, 9	S-SSW.
Oregonian, Am. S. S.	Balboa	Los Angeles	14 55 N	94 03 W	Oct. 27	4 p., 27	do	29.86	N	N, 8	NNE	N, 10	Steady.
Kiyo Maru, Jap. S. S.	Yokohama	San Pedro	39 42 N	166 30 E	Oct. 30	8 a., 30	Nov. 1		ESE	ESE, 5	SSE	SE, 8	ESE-SSE.

NORTH PACIFIC OCEAN, OCTOBER, 1932

By WILLIS E. HURD

Atmospheric pressure.—The average pressure over the North Pacific Ocean for October, 1932, in general departed very little from normal. The Aleutian LOW was strongly developed, with pressures from the western Gulf of Alaska to the central Bering Sea averaging less than 29.6 inches. The North Pacific HIGH crested near the California coast. A rather peculiar pressure abnormality occurred in the China Sea, with Naha reading 0.08 inch above and Manila 0.06 below the average.

TABLE 1.—*Averages, departures, and extremes of atmospheric pressure at sea level, North Pacific Ocean, October, 1932, at selected stations*

Stations	Average pressure	Departure from normal	Highest	Date	Lowest	Date
	Inches	*Inch*	*Inches*		*Inches*	
Point Barrow	(1)	(1)	(1)	(1)	(1)	(1)
Dutch Harbor	29.57	−0.08	30.54	25, 31	28.60	8
St. Paul	29.58	−0.05	30.52	31	28.60	8
Kodiak	29.58	−0.01	30.50	5	28.36	19
Juneau	29.88	+0.01	30.53	5	29.23	14
Tatoosh Island	30.06	+0.05	30.56	24	29.47	13
San Francisco	30.02	+0.01	30.25	25	29.72	7
Mazatlan	29.83	−0.08	29.96	28, 31	29.74	3, 15
Honolulu	30.01	+0.01	30.12	15	29.84	4
Midway Island	29.99	−0.04	30.30	26	29.76	29
Guam	29.85	+0.01	29.90	7, 31	29.74	24
Manila	29.81	−0.06	29.88	7, 9	29.70	23
Naha	29.98	+0.08	30.18	11	29.80	3
Chichishima	29.95	+0.04	30.16	11, 21	29.42	3
Nemuro	29.92		30.22	14	29.40	4

1 Data for 19 days only—not used.

NOTE.—Data based on 1 daily observation only, except those for Juneau, Tatoosh Island, San Francisco, and Honolulu, which are based on 2 observations. Departures are computed from best available normals related to time of observation.

Cyclones and gales.—During the month the region of the North Pacific HIGH was unusually exempt from cyclones. The majority of LOWS moved in higher latitudes, and comparatively few gales occurred south of latitude 35° N. The number of days with gales was somewhat in excess of that for September, and the weather was rougher, owing to the greater frequency of disturbances, but the winds increased but little in violence, and in our reports no extratropical gales exceeded force 10. In the region of their greatest frequency, south and southwest of the central Aleutians, moderate gales were frequent, but those in excess of force 7 occurred on a few days only in any locality. The accompanying table of gales shows their distribution.

Tropical disturbances.—Apparently three disturbances of tropical origin occurred in far eastern waters. The earliest originated on the last of September, and on the 1st to 3d of October moved slowly northward as a typhoon in the vicinity of the Ogasawara Islands. On the 4th, with greatly increased speed, it passed southeastern Honshu, and was southeast of the Kuril Islands on the 5th. This storm on the 4th caused the highest wind velocity, force 12, thus far reported for the month, and caused gales of force 11 and 10 on the 3d and 5th, respectively.

The second disturbance originated east of the North China Sea on or about the 7th and moved northeastward at some distance from the Japanese coast until the 10th, when it entered the low-pressure region of the Aleutians. During its passage gales of force 9 to 10 were reported from the Ogasawara Islands northward.

The third tropical cyclone developed in lower Philippine waters on the 23d, and from the 24th to 27th it lay in the channel between Luzon and Taiwan, later moving west-southwest into the South China Sea. There are no details as to its intensity except for reports of northerly gales near Taiwan and Luzon on the 26th.